IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Previously Presented): A handover method for a wireless mobile ad-hoc network including interconnected mobile nodes, wherein a connectivity of the nodes is time-varying, the method comprising:

determining Quality of Service (QoS) resources of each potential routing path between a mobile node and a correspondent node;

pre-allocating the QoS resources along at least one potential routing path in advance before initiating a handover of a data flow to be transmitted from the mobile node to the correspondent node via a selected routing path; and

redirecting the data flow to a routing path with best available QoS capabilities as the selected routing path and, in case of sufficient QoS capabilities, reserving the determined QoS resources for the data flow to be transmitted via the selected routing path.

Claim 2 (Previously Presented): The handover method according to claim 1, further comprising:

informing running applications about an upcoming handover event.

Claim 3 (Previously Presented): The handover method according to claim 1, further comprising:

announcing QoS parameters that can be expected after completing the handover.

Claim 4 (Previously Presented): The handover method according to claim 1, further comprising:

propagating address-mapping information in the mobile ad-hoc network.

Claim 5 (Previously Presented): The handover method according to claim 1, further comprising:

applying soft reservation requests to reserve, update and monitor QoS parameters along a routing path between the mobile node and the correspondent node.

Claim 6 (Previously Presented): The handover method according to claim 1, further comprising:

applying hard reservation requests to reserve, change or remove predefined QoS parameters on a routing path between the mobile node and the correspondent node.

Claim 7 (Previously Presented): The handover method according to claim 1, further comprising:

releasing pre-allocated resources on the at least one potential routing path other than the selected routing path.

Claim 8 (Previously Presented): The handover method according to claim 1, further comprising:

moving a mobile node out of a covering range of the mobile node;

pre-selecting handover candidate nodes from nodes in the interconnected mobile nodes dependent on a received signal power of RF signals received via said handover candidate nodes;

sending a handover initiation message to the correspondent node to initiate a handover from the mobile node to one of said handover candidate nodes;

selecting the handover candidate node including best available QoS capabilities on a routing path from the mobile node to the correspondent node based on information contained in a handover QoS metrics collection message received from the handover candidate nodes; and

performing hop-by-hop sending of a handover confirmation message with an embedded bandwidth reservation request piggybacked within traffic from the mobile node via the selected handover candidate node to the correspondent node.

Claim 9 (Previously Presented): The handover method according to claim 8, wherein the correspondent node performs the following:

sending a handover QoS metrics probing message hop-by-hop to each handover candidate node;

performing a QoS probing procedure for analyzing QoS capabilities of each handover candidate node; and

performing a resource pre-allocation along the at least one potential routing path between the mobile node and the correspondent node.

Claim 10 (Previously Presented): The handover method according to claim 9, wherein each handover candidate node performs the following:

executing a QoS metrics collection procedure; and

sending a handover QoS metrics collection message as a reply message to a handover QoS metrics probing message received from the correspondent node to inform the mobile node of QoS capabilities of each handover candidate node.

Claim 11 (Previously Presented): The handover method according to claim 1, wherein the mobile node communicates with the correspondent node via plural intermediate network nodes in the interconnected mobile nodes, at least one moved intermediate network node moves out of a covering range of the at least one moved intermediate network node, and the at least one intermediate node performs the following:

pre-selecting nodes from handover candidate nodes dependent on the received signal power of RF signals received via the handover candidate nodes; and

sending a handover initiation message to a one-hop neighbor node on the routing path towards the correspondent node to initiate a handover from the at least one moved intermediate network node to one of said handover candidate nodes.

Claim 12 (Previously Presented): The handover method according to claim 11, wherein the one-hop neighbor node of the at least one moved intermediate network node on the routing path from the mobile node towards the correspondent node performs the following:

sending a handover QoS metrics probing message hop-by-hop to each handover candidate node to probe QoS capabilities on each routing path towards the handover candidate nodes;

performing a QoS probing procedure for analyzing QoS capabilities of each handover candidate node; and

performing a resource pre-allocation along potential routing paths between the mobile node and the correspondent node via said one-hop neighbor node.

Claim 13 (Previously Presented): The handover method according to claim 12, wherein each handover candidate node performs the following:

executing a QoS metrics collection procedure; and

sending a handover QoS metrics collection message as a reply message to the

handover QoS metrics probing message received from the one-hop neighbor node of the

moved intermediate network node on the routing path from the mobile node towards the

correspondent node to an opposite one-hop neighbor node of the moved intermediate network

node on the routing path from the mobile node towards the correspondent node to inform the

opposite one-hop neighbor node of QoS capabilities of each handover candidate node.

Claim 14 (Previously Presented): The handover method according to claim 13,

further comprising:

selecting, by the opposite one-hop neighbor node, a handover candidate node which

offers best available QoS capabilities on the routing path from the mobile node to the

correspondent node based on information contained in the handover QoS metrics collection

messages received from the handover candidate nodes.

Claim 15 (Previously Presented): The handover method according to claim 14,

further comprising:

performing, by the mobile node, hop-by-hop sending of a handover confirmation

message with an embedded bandwidth reservation request piggybacked within traffic from

the mobile node to the correspondent node via the selected handover candidate node.

Claim 16 (Previously Presented): A cellular telecommunication network with QoS-

aware handover management functionality providing a handover method according to claim

1.

Claim 17 (Previously Presented): A mobile base station, comprising:

a determining unit configured to determine Quality of Service (QoS) resources of each potential routing path to a correspondent node;

a pre-allocating unit configured to pre-allocate the QoS resources along at least one potential routing path in advance before initiating a handover of a data flow to be transmitted to the correspondent node via a selected routing path;

a redirecting unit configured to redirect the data flow to a routing path with best available QoS capabilities as the selected routing path and, in case of sufficient QoS capabilities, reserve QoS resources for the data flow to be transmitted via the selected routing path.

Claim 18 (Currently Amended): A computer ~~readable medium including~~ program product that stores computer executable instructions, wherein the instructions, when executed by a processor, cause the processor to perform a method comprising:

determining Quality of Service (QoS) resources of each potential routing path between a mobile node and a correspondent node;

pre-allocating the QoS resources along at least one potential routing path in advance before initiating a handover of a data flow to be transmitted from the mobile node to the correspondent node via a selected routing path; and

redirecting the data flow to a routing path with best available QoS capabilities as the selected routing path and, in case of sufficient QoS capabilities, reserving the determined QoS resources for the data flow to be transmitted via the selected routing path.